

Claims

1. A mounting anchor for a motor vehicle, comprising:
  - a locking bar, wherein a portion of the locking bar is shaped to receive a mateable connector, and wherein an interior of at least portions of first and second sides of the locking bar include grooves;
  - a first switch positioned adjacent the first side of the locking bar;
  - a first movable plate positioned to slidably engage the groove on the first side of the locking bar, the first movable plate including a first activation area for receiving a portion of the first switch and a first aperture for receiving a first rotatable arm;
  - a second switch positioned adjacent the second side of the locking bar, wherein the second side of the locking bar is opposite the first side of the locking bar; and
  - a second movable plate positioned to slidably engage the groove on the second side of the locking bar, the second movable plate including a second activation area for receiving a portion of the second switch and a second aperture for receiving a second rotatable arm, wherein the mateable connector includes at least one of the first and second rotatable arms which when received in an associated one of the first and second apertures initiates movement of an associated one of the first and second movable plates and activation of at least one of the first and second switches.
2. The anchor of claim 1, wherein the locking bar is shaped to engage a releasable lock for receiving and retaining the locking bar, and wherein the releasable lock is included within the mateable connector.
3. The anchor of claim 2, wherein the lock includes a pair of locking jaws each shaped to engage the locking bar.

4. The anchor of claim 1, wherein the mateable connector is attached to one of a front of an infant seat, a rear of the infant seat, a booster seat and a car bed.

5. The anchor of claim 1, further including:  
a spring for biasing the first and second movable plates toward a front of the locking bar.

6. The anchor of claim 5, wherein the spring includes separate springs for individually biasing the first and second movable plates.

7. The anchor of claim 1, wherein the first and second movable plates are slidably engaged.

8. The anchor of claim 1, wherein the first and second movable plates are coplanar.

9. A mounting anchor system for a motor vehicle, comprising:  
a locking bar, wherein a portion of the locking bar is shaped to receive a mateable connector, and wherein an interior of at least portions of first and second sides of the locking bar include grooves;  
a first switch positioned adjacent the first side of the locking bar;  
a first movable plate positioned to slidably engage the groove on the first side of the locking bar, the first movable plate including a first activation area for receiving a portion of the first switch and a first aperture for receiving a first rotatable arm;  
a second switch positioned adjacent the second side of the locking bar, wherein the second side of the locking bar is opposite the first side of the locking bar;

a second movable plate positioned to slidably engage the groove on the second side of the locking bar, the second movable plate including a second activation area for receiving a portion of the second switch and a second aperture for receiving a second rotatable arm, wherein the mateable connector includes at least one of the first and second rotatable arms which when received in an associated one of the first and second apertures initiates movement of an associated one of the first and second movable plates and activation of at least one of the first and second switches; and

an electrical interface circuit electrically coupled to the first and second switches, the interface circuit providing an indication of whether the first and second switches are activated.

10. The system of claim 9, wherein the locking bar is shaped to engage a releasable lock for receiving and retaining the locking bar, and wherein the releasable lock is included within the mateable connector.

11. The system of claim 10, wherein the lock includes a pair of locking jaws each shaped to engage the locking bar.

12. The system of claim 9, wherein the mateable connector is attached to one of a front of an infant seat, a rear of the infant seat, a booster seat and a car bed.

13. The system of claim 9, further including:  
a spring for biasing the first and second movable plates toward a front of the locking bar.

14. The system of claim 13, wherein the spring includes separate springs for individually biasing the first and second movable plates.

15. The system of claim 9, wherein the first and second movable plates are slidably engaged.

16. The system of claim 9, wherein the first and second movable plates are coplanar.

17. A mounting anchor for a motor vehicle, comprising:  
a locking bar, wherein a portion of the locking bar is shaped to receive a mateable connector, and wherein an interior of at least portions of first and second sides of the locking bar include grooves;

a first switch positioned adjacent the first side of the locking bar;

a first movable plate positioned to slidably engage the groove on the first side of the locking bar, the first movable plate including a first activation area for receiving a portion of the first switch and a first aperture for receiving a first rotatable arm;

a second switch positioned adjacent the second side of the locking bar, wherein the second side of the locking bar is opposite the first side of the locking bar;

a second movable plate positioned to slidably engage the groove on the second side of the locking bar, the second movable plate including a second activation area for receiving a portion of the second switch and a second aperture for receiving a second rotatable arm, wherein the mateable connector includes at least one of the first and second rotatable arms which when received in an associated one of the first and second apertures initiates movement of an associated one of the first and second movable plates and activation of at least one of the first and second switches, and wherein the first and second movable plates are slidably engaged and coplanar; and

a spring for biasing the first and second movable plates toward a front of the locking bar.

18. The anchor of claim 17, wherein the locking bar is shaped to engage a releasable lock for receiving and retaining the locking bar, and wherein the releasable lock is included within the mateable connector.

19. The anchor of claim 18, wherein the lock includes a pair of locking jaws each shaped to engage the locking bar.

20. The anchor of claim 17, wherein the mateable connector is attached to one of a front of an infant seat, a rear of the infant seat, a booster seat and a car bed.

21. The anchor of claim 17, wherein the spring includes separate springs for individually biasing the first and second movable plates.